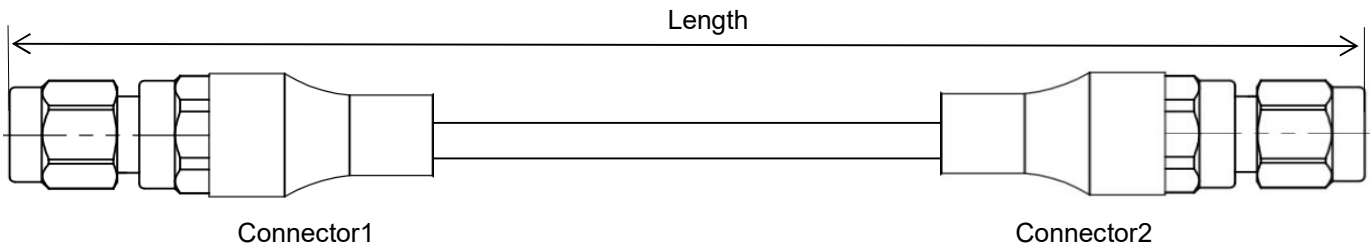


## Super-flexible Phase Stable Test Cable Assembly, Using UF520

DC-26.5 GHz, SMA Male to SMA Male

UF520-SMAMSMAM-L(L:Length)

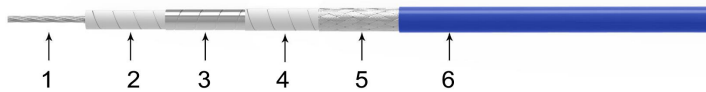


- Length can be in meter or in inch etc, e.g, UF520-SMAMSMAM-1M. Standard length tolerance:  $\pm 1.5\%$ . Custom lengths and other connector types available.
- Length is measured from one connector end to the other connector end as shown above. For RA connectors, use the pin center-line.

### Configuration

Connector 1	SMA male	Connector 2	SMA male
Body	Passivated stainless steel	Body	Passivated stainless steel
Center Contact	Gold plated brass	Center Contact	Gold plated brass
<b>Cable Type</b>	UF520		

### Cable Construction



No.	Construction	Size (mm)	Materials
1	Center Conductor	1.02	Stranded silver plated copper
2	Dielectric	3.03	LD PTFE wrapping
3	Outer Conductor	3.22	Silver plated copper strip wrapping
4	Interlayer	3.47	PTFE
5	Outer Shield	4.05	Silver plated copper wire braiding
6	Inner Jacket	5.20	PUR



### Electrical

Frequency	DC-26.5 GHz
Impedance	50 $\Omega$
VSWR Max	1.25
IL Max(1 meter assembly)	3.1dB
*Mechanical Phase Stability	$< \pm 5^\circ$
Amplitude Stability vs Shaking	$< \pm 0.1\text{dB}$

### Mechanical & Environmental

Min.Bending Radius Static	18mm
Min. Bending Radius Repeated	50mm
Velocity of Propagation	76%
Temperature(Operation)	-50~85 $^\circ\text{C}$
Temperature(Storage)	-60~85 $^\circ\text{C}$

\* Wrap the cable 360 degree around a mandrel whose diameter is ten times of the cable jacket size.

## Bulk Cable Attenuation(Typical@25°C) & Power(VSWR=1.0; 40°C; Sea level)

Frequency MHz	300	1000	2000	4000	6000	8000	10000	12000	14000	16000	18000	26500
dB/100 Meter	20.4	38.5	55.9	82.0	103.2	121.9	139.0	154.9	169.9	184.2	198.0	252.1
Avg.Power kW	0.280	0.149	0.102	0.070	0.055	0.047	0.041	0.037	0.034	0.031	0.029	0.023

$$\text{Attenuation at any frequency} = [1.136600 \times \text{SQRT}(\text{FMHz})] + [0.002530 \times \text{FMHz}]$$

- Notes:**
- 1) The above attenuation refers to typical loss of cable only, max loss is 1.1 times of typical loss. Insertion loss per connector is estimated as  $0.03\text{dB} \times \text{SQRT Freq}(\text{GHz})$ .
  - 2) Power handling values are calculated based on cable properties. Power handling will vary based on connector type and actual VSWR of the cable assembly.

## Typical Test Data (UF520-SMAMSMAM-1M)

